

# **EXHIBIT “A-1”**

# WRIGHT GROUP INC.

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August 9, 2010

Law Offices of Dennis J. Crawford  
619 S. White Horse Pike  
Audubon, NJ 08106

Attn: Dennis J. Crawford

Insured:

Anders Skeini & Claudia Tatanelli

Loss Location:

2125 Pine Street  
Philadelphia, PA

Co. Claim #:

0804164

Date of Loss:

12-3-08

WGI File #:

57545

## **Assignment:**

On September 14, 2009, Attorney Dennis Crawford, of The Law Offices Of Dennis J. Crawford contacted this office relative to a fire that occurred at the above-mentioned insured location. We were requested to conduct an examination of the Electrolux dryer and address the involvement of this appliance in the cause of the fire in a detailed report.

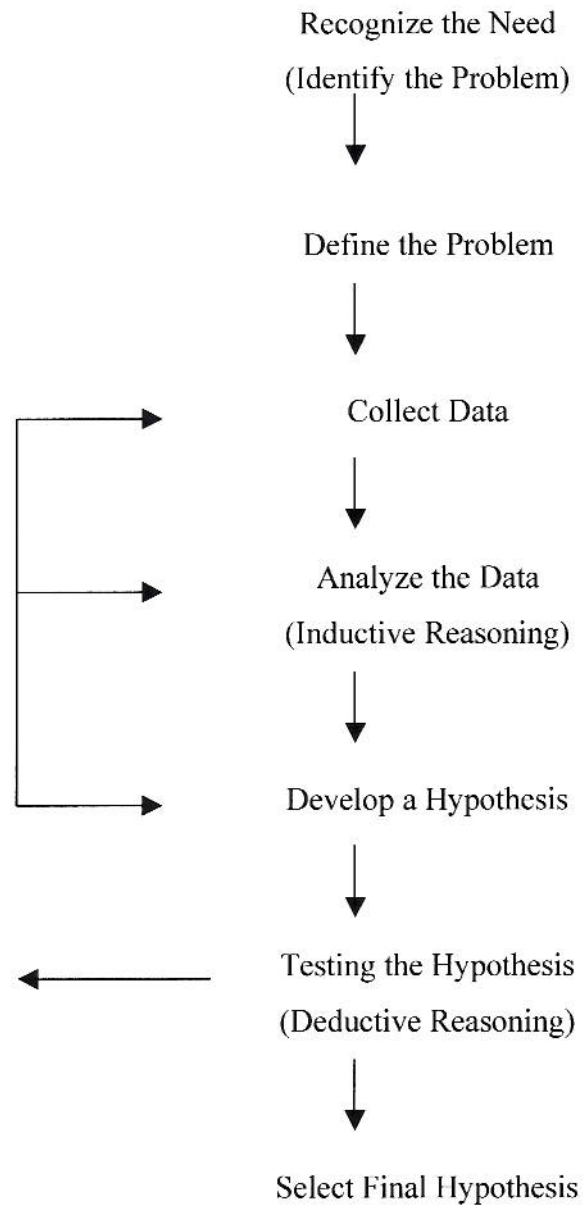
## **Basic Methodology:**

The basic methodology utilized by this author in the investigation of this fire is outlined in NFPA 921 Guide for Fire and Explosion Investigations, 2008 edition. The basic methodology utilizes the scientific method as outlined in chapter 4.3 of NFPA 921. The scientific methodology is listed below.

### **NFPA 921 Definitions:**

**3.3.139 Scientific Method.** The systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of a hypothesis.

### Scientific Method:



## **Methodology Used:**

The methodology used throughout the analysis of the origin and cause of this fire event is outlined in NFPA 921, 2008 Edition, Chapter 4. The systematic approach to all aspects of the analysis used during this origin and cause analysis is that of the scientific method. The use of the scientific method during fire investigation analysis is mandated in NFPA 1033, Professional Qualifications For Fire Investigator.

The problem was defined as to determine the cause of the fire and to determine whether the subject Electrolux Dryer was involved in the fire cause and/or to identify a sub-component within the Electrolux that is related to the fire cause. To accomplish this, data was collected in many forms. That data was analyzed. From the analysis of the data, hypothesis were developed and tested. A peer review procedure was utilized throughout this process in this manner. Conclusions would then be formed with the final hypothesis selected as to the origin and cause of the fire.

## **Executive Summary:**

Our investigation revealed that the fire originated within the Electrolux dryer. The ignition source was the flame and/or hot gasses produced by the gas fired burner. The first fuel ignited was lint collected within the diffuser mounted to the rear wall of the dryer cabinet, located directly behind the drum. The ignition event was the direct result the first fuel (lint) coming into contact with a competent heat source (flame/gasses from the gas burner). The ignited lint was carried through the dryer drum and ignited additional lint that was collected in the area of the lint screen and trap duct. These components are made of plastics, allowing them to be ignited by the burning lint, which resulted in additional growth fuels within the dryer cabinet and spread of fire out of the cabinet to adjacent items. This fire event was allowed to occur because of the defective design of the Electrolux dryer in that the design of the dryer allows for lint to collect at the heat source in areas of the cabinet where it goes unobserved by the user.



The design and warning of the subject dryer was unreasonably dangerous and defective for the following reasons:

- Electrolux knew or should have known that the clothing in the drum and the lint that collects within dryers are combustible and that the heat sources within dryers, both electric and gas models, have sufficient heat energy to ignite these combustible materials.
- Electrolux should have better separated potential ignition sources from the first fuels within the dryer through the use of a more appropriate and safer dryer design used by other manufacturers, as opposed to the subject dryer design.
- Electrolux breached the duty of basic Safety Engineering principals by not properly designing adequate guards or safety devices in their existing dryer design type to protect against known flaws in the safety of the subject design.
- A simple design change, by using their existing gas dryer design and replacing the gas burner assembly with a package style heating element found in other manufacturers' designs would eliminate or significantly reduce the fire hazards associated with the electric dryer design. This relocation of the heating element would remove the heating element from its close proximity to the rear of the drum and the combustible lint and clothing that is known to collect there.
- A simple design change, by installing an engineered guard in the diffuser pan of the gas dryer design, would further separate the lint that is known to accumulate in the gas diffuser pan from the heat source, in either the existing gas design or proposed redesign of the electric dryer with the heating element relocated. This design would significantly reduce the known problem of fires caused by the ignition of lint by the heat source.
- Electrolux has since changed the design of their gas and electric dryers for their newer models, which is similar to that of dryers manufactured by many of their competitors and also is the most common dryer design type on the market today. This design concept was available at the time the subject clothes dryer was manufactured, as other manufacturers have used it for over 50 years.
- Electrolux failed to recognize that it is reasonably foreseeable that the user may ignore any instructions as to regular maintenance and failed to incorporate engineered guards and safety devices to prevent or reduce the risk of property damage, personal injury or

death from fire. The use of warning labels and safety instructions should never be the primary preventative measure in regards to fire safety.

- While Electrolux provided warnings in their User's Guide that the interior of the dryer should be cleaned every 18 months by an authorized service person, those warnings are subject to user interpretation.
- There were no warning labels on the subject dryer regarding any risk of fire involving the accumulation of lint within the dryer due to the failure to follow the recommended 18-month maintenance schedule. While the standard style Electrolux dryers do not have this warning label, the laundry centers, a combination washer/dryer, has a warning label on the appliance indicating to the user the need for routine service every 18 months.
- Electrolux was negligent by not instructing how to conduct the required regular maintenance of their dryers. The Service Manual for 27" Gas and Electric dryers authored by Electrolux for use with the maintenance of their dryers does not contain any specific instructions on the required steps necessary to conduct the 18-month maintenance recommended to prevent lint fires.
- Electrolux produced a Service Information Bulletin in November of 2000 relative to their knowledge that most people use flexible ductwork in the installation of their dryers.
- Research by the Consumer Product Safety Commission also indicates that over 40% of the participants in a recent survey, utilized flexible foil ductwork. This was determined as part of a consumer survey conducted by the CPSC that supports that the average person is unaware of the fire hazards associated with clothes dryers in regards to the installation and maintenance of those appliances.
- Safety devices, such as an airflow monitoring system to monitor the condition of the external exhaust duct or a operational cycle counter with a reminder light to service the dryer after a specific number of uses could have been employed to actively notify the user as to the need for service and as a safety device to prevent fires should the need for service be ignored. Whirlpool's Cabrio line of residential clothes dryers incorporates "airflow detection capabilities" which monitors the exhaust system and provides an error code on the dryer control console to actively warn users of a restricted exhaust condition.

- The Electrolux dryer in its subject design was unreasonably dangerous and defective because it posed a risk of property damage or serious injury without warning of the risks or by failing to use an adequate guard or safety.

These conclusions and opinions are based on an examination of the subject dryer, comparative analysis of the subject Electrolux 5.7/5.8 Cu. Ft. dryers compared to the new 7.0 Cu. Ft. dryers manufactured by Electrolux, other dryers manufactured by Electrolux's competitors, numerous exemplar Electrolux dryers of the same design types, review of the User's Guide, Installation Instructions, Service Manuals and other documents related to dryers manufactured by Electrolux, operational and fire testing of dryers of various makes and models, and our experience, training and knowledge as a fire investigators and forensic consultants.

### **Investigation:**

- Joint examination of evidence on September 15, 2009
- Interview of Anders Skeini conducted on July 28, 2010

### **Information Reviewed:**

- Origin and Cause report and photographs by John Goetz of J.F. Goetz & Associates, Inc., dated October 5, 2009
- NFPA 921
- Kirks Fire Investigation by John Dehaan
- The SFPE Handbook of Fire Protection Engineering
- The Ignition Handbook by Vytenis Babrauskas
- CPSC Clothes Dryer Maintenance Consumer Opinion Survey, April 2010
- CPSC FTI Report Dated February 2000
- CPSC March 1999 report on Electric and Gas Dryers
- CPSC Overheated Dryers Can Cause Fires June 2003
- CPSC May 2003 Dryer Report



- CPSC Letter to McDowell June 8, 2004
- McDowell Owens Letter to CPSC dated 7/11/03
- CPSC Log of Meetings
- CPSC Hazard Report Dated December 2004
- CPSC Letter to UL Dated May 30, 2003
- AHAM Letter to CPSC Dated January 21, 2004
- CPSC Letter to AHAM Dated March 19, 2004
- AHAM Data Fire Incidentals Dated August 2002
- AHAM Letter to CPSC Dated September 12, 2003
- CPSC Letter to AHAM Dated November 20, 2003
- CPSC Letter to AHAM Dated November 21, 2003
- CPSC Memorandum Dated March 12, 1999
- CPSC Memorandum Dated November 5, 1998
- CPSC Memorandum Dated May 12, 1998
- CPSC Report Dated March 1999
- AHAM Clothes Dryer Fact Sheet
- Owners Manuals for Electrolux gas and electric dryers
- Service Manuals for Electrolux gas and electric dryers and laundry centers
- Wiring Schematics and Mini Manuals for exemplar dryers
- Manuals and associated literature from various other appliance manufacturers
- UL 2158 Standard for Electric Clothes Dryers
- UL 2158A Standard for Clothes Dryer Transition Duct
- ANSI Z21.5.1 Standard for Gas Clothes Dryers
- ANSI Z535 Safety Standards
- Human Factors Design Handbook Second Edition by Woodson, Tillman & Tillman
- Applied Science and Engineering: Basic Safety Engineering by John Mrosczyk
- NFPA 325 Fire Hazard Properties of Flammable Liquids, Gases and Volatile Solids
- The Flammability Handbooks For Plastics Fourth Edition by Carlos Hilado
- U.S. Department of Energy Dryer Study
- University of Kentucky Report Dated August 1992

- Over 100 Origin and Cause Analysis Investigations Completed by Multiple other Origin and Cause Fire Investigators
- Accident Reconstruction Analysis Inc. Dated March 15, 2000
- 11 Exemplar Dryers inspected by Accident Reconstruction Analysis
- Wright Group examinations of burned and unburned gas and electric dryers
- Wright Group testing on gas and electric dryers
- Wright Group Examination and testing of flexible, semi-rigid and rigid ducts
- Testing of others
- Depositions of Electrolux's Experts (Carl King, Fred Pauk, Thomas Bajzek, Richard Keith & Robert Sampey)
- Expert reports of others
- Electrolux Service Bulletins
- Whirlpool's Cabrio line of dryers documentation w10100920b

**Review of Origin & Cause Report and Photographs by John Goetz of J.F. Goetz & Associates, Inc., dated October 5, 2009:**

Investigator John Goetz conducted the initial scene investigation on December 5, 2008. The secondary examination of the scene was conducted on December 11th and December 17<sup>th</sup>, 2008. A joint examination of the scene was conducted on January 13, 2009. Present at this joint inspection to represent the dryer manufacturer, Electrolux North America was Mr. A. Profka of James Valentine Associates. Mr. Goetz's determination as to the origin and cause of the fire was that the fire originated in the third floor laundry room and was caused by the gas-fired clothes dryer. All other accidental and intentional causes were eliminated based upon his scene examination and witness statements.

At the time of his inspection, the dryer was in its original position, installed under counter in the third floor laundry room. The interior of the drum contained no remains of the clothing load,

which had been removed upon fire discovery by the housekeeper. Photographs of the scene revealed that the dryer was installed below the counter, with the top panel removed from the appliance for clearance. The dryer was vented through the use of a flexible foil duct that ran from the dryer to the 4" plastic louvered vent at the exterior wall to the left side of the dryer. Based upon the scene photographs, the length of flexible foil transition duct was estimated at approximately 3-4 feet, with one tight bend to the left at the rear of the dryer, and a sweeping bend toward the front of the dryer and upwards to the exterior vent pipe.

Mr. Goetz interviewed Ms. Tattanelli on December 5, 2008. The following is an excerpt from his report:

"She stated that she has a live-in helper, Maria, who assists with child care for her the two children ages four and six and also assists with house chores. There is also an elderly woman named Juviana, who also assists. On the day of the fire, Maria and Juviana ??? did laundry in the morning. They normally clean the lint filter after a few loads and did so that morning. Juviana observed smoke coming from the front bottom of the dryer. She removed the clothes and lint screen and observed fire below the lint screen. She put two cups of water down the lint screen hole, but the fire did not go out. Juviana and Maria called the fire department and exited the building."<sup>1</sup>

Investigator Goetz collected the following evidence to be analyzed at a future joint examination of evidence:

1. Frigidaire gas-fired dryer
2. Plug from counter above dryer
3. Debris from the drum
4. Exterior pipe from hood assembly
5. Louvered flap from hood assembly
6. Receptacle from behind washing machine
7. Debris on counter above dryer
8. Shelf above dryer with under-counter light

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<sup>1</sup> Origin and Cause Report of John Goetz of J.F. Goetz & Associates, Inc., dated October 5, 2009, Pg. 3



## **Interview Summary of Anders Skeini, July 28, 2010:**

On July 28, 2010, Michael Stoddard of the Wright Group, Inc. conducted an interview of the insured, Anders Skeini. The following items are facts learned during the interview:

- The subject clothes dryer was a gas-fired Frigidaire, model number was unknown
- The dryer was purchased in late 2002 or early 2003 from Best Buy in Delaware
- The dryer was originally installed by Best Buy in their old home after the time of purchase using a flexible metal duct that tied into the existing 10-15 foot length of plastic flexible duct that was already installed in the home
- The dryer was moved from their old home to their new home in March or April of 2006 by their General Contractor, Randy Scott
- Randy Scott installed the dryer in the new home using a flexible foil duct approximately 3 feet long that ran from the rear of the dryer, to the left side of the dryer and vented through the exterior wall to the left side of the dryer
- The exterior vent was the white plastic louvered type without a guard or a screen and was located three stories high
- Mr. Skeini checked the flexible duct on a regular basis but it was never crushed, kinked or was full of lint
- He never disconnected or cleaned the flexible duct
- He couldn't reach the exterior louvered vent to inspect or clean it
- The dryer had never been removed from under the counter or disassembled for cleaning or service
- He stated that the lint screen should have been emptied between every load, as instructed on the appliance
- He did not recall any instructions or warnings on the appliance's labels
- The instruction manual came with the dryer but he didn't read it and no longer has the manual
- The washing machine was installed under counter to the right side of the dryer
- The open area under the counter to the left of the dryer had nothing stored in it, just the exhaust duct



- The counter top above the dryer was typically kept clear of stored items and laundry
- The housekeeper, Juviana, was operating the dryer at the time of the fire and he had no details regarding the settings for the dryer, the type of load in the drum or how many loads had been dried that morning
- Juviana smelled smoke sometime around 10 am on the morning of the fire and discovered it was coming from the dryer, but he did not have any further details of discovery
- Both Mr. Skeini and his wife were out of town on the day of the fire

### **Fire Cause Determination:**

To determine the cause of the fire, the competent heat source that caused ignition of the available fuel as well as the first fuel were identified. Further, this portion of the analysis addresses the factors that brought the ignition source and the first fuel together.

NFPA 921, 2008 Edition, Section 18.1.2 states:

*The determination of the cause of a fire requires the identification of those materials, circumstances and factors that were necessary for the fire to have occurred. Those materials, circumstances and factors include, but are not limited to, the device, appliance or equipment involved in the ignition, the presence of a competent ignition source, the type and form of the material first ignited, and the failures, circumstances or human actions that allowed the materials, circumstances and factors to come together to allow the fire to occur.*

According to NFPA 921, and all other teachings known to this writer, a credible cause determination is based upon all of the available evidence and is achieved through the convincing elimination of all other reasonable potential causes within the appliance of origin, given that the only remaining causation factor is consistent with all known facts. This analysis of the potential ignition sources within the subject appliance is considered in light of all of the information provided to date and the relationship to ignition and fire dynamic principles.

## **Evidence Examination – 9/15/09:**

The evidence was examined at the Law Office of Dennis J. Crawford in Audubon, New Jersey on September 15, 2009. Present for the manufacturer, Electrolux North America, was James Crabtree of Affiliated Engineering, the expert hired by Electrolux and Carl King, Product Safety Engineer for the Laundry Division of Electrolux North America. This joint examination of evidence was conducted using a previously agreed upon evidence examination protocol accepted by all parties.

The subject appliance is a standard gas-fired clothes dryer manufactured by Electrolux and the brand name could not be positively identified due to fire damage, though the insured had indicated it was a Frigidaire brand appliance. The label on the dryer has been fire damaged making it impossible to determine the model number or serial number. The date code stamped on the dryer cabinet is KMB. This indicates the dryer was manufactured on 11/2002.

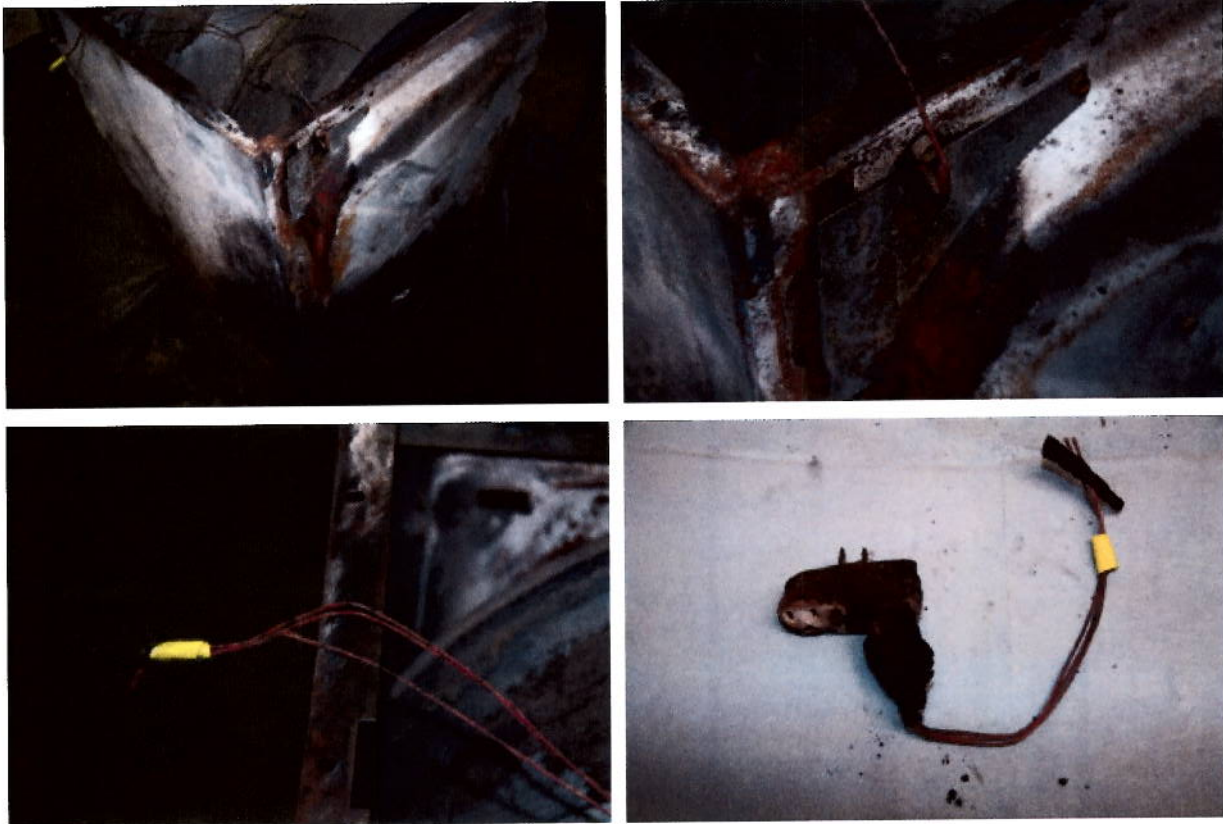
The exterior examination of the dryer revealed that the heaviest oxidation and heat damage to the right front corner was consistent with the trap duct/blower housing being consumed during the fire. The paint on the left side was damaged. The right and front sides were the most heavily oxidized. The top panel was not attached or included with the evidence. Based upon the scene photographs, the top panel was removed at the time the dryer was installed at the property to allow it to be installed under counter, beside the front-loading washing machine. In addition, the dryer door was no longer attached. All exterior fire patterns were consistent with the fire originating within the dryer.



**Exterior of Subject Dryer**

Examination of the rear of the dryer revealed the louvered access panel was in place and all of the fasteners on the rear of the cabinet were OEM. The dryer was equipped with a 120V 3-wire pigtail, only a portion of which was still attached to the dryer. The power cord insulation was entirely consumed. The severed ends displayed mechanical damage, indicating they were cut or broken after the fire. The plug end was included with the other evidence items and was still plugged into the single receptacle from the wall of the laundry room. There was no sign of electrical activity on the power cord or at the power cord connections.

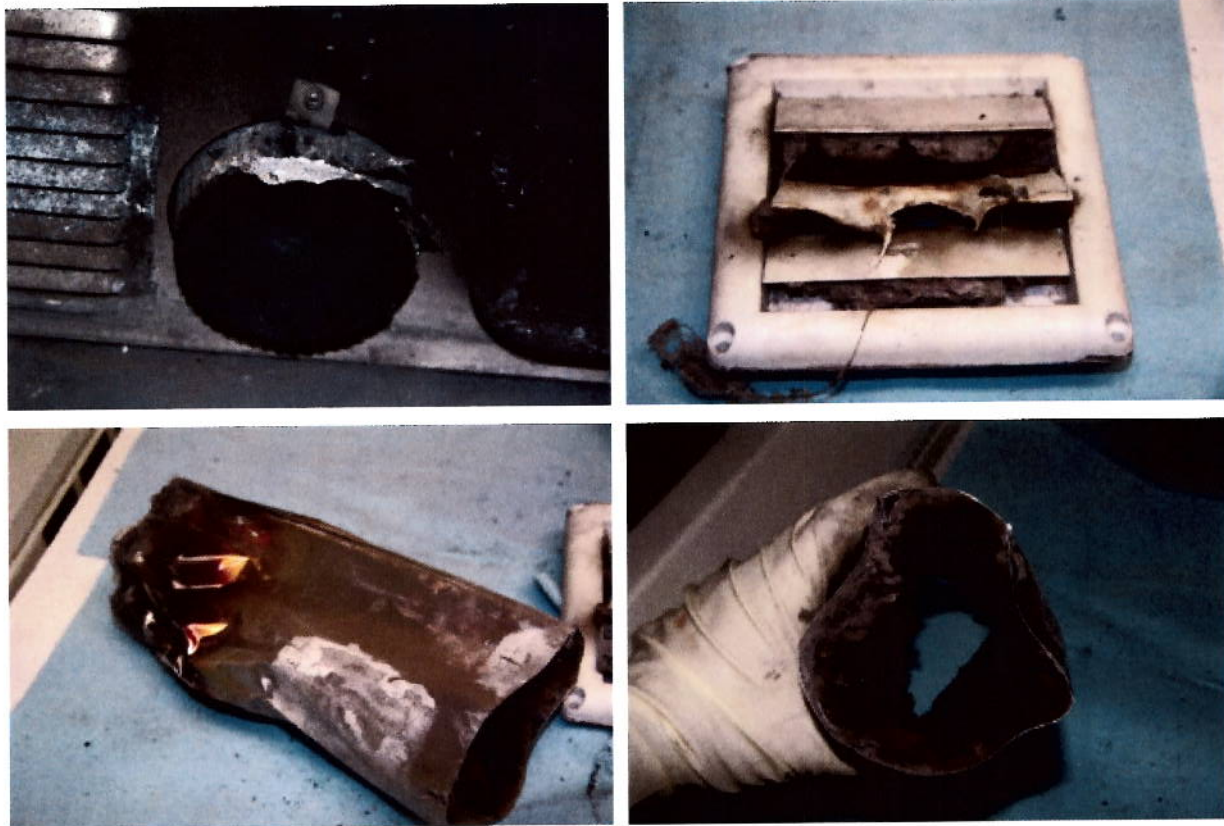




**Power Cord**

There was a small section of flexible foil transition duct remaining attached to the exhaust connection at the rear of the dryer cabinet. With the exception of the small amount of foil material attached to the rear of the dryer, the remainder of the transition duct was not included for examination or did not survive the fire. Based upon the scene photographs it is evident that the flexible foil duct was attached to the rear of the dryer, took a 90° bend and ran to the left side of the dryer, made a sweeping bend before attaching to the louvered vent at the exterior wall. The flexible foil duct was estimated to be approximately 3-4 feet long. Also included with the evidence was the louvered exterior vent assembly, which contained a heavy amount of soot-blackened lint. The plastic louvers were only slightly melted.





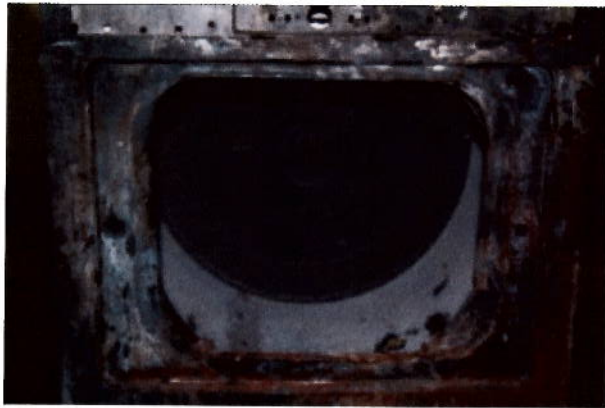
**Exhaust Duct Components**

The front mounted control console had been heavily damaged by fire. All three control knobs had been consumed. This made it impossible to assist in the verification of the dryer settings at the time of the fire. In addition, the timer body was completely destroyed. This made it impossible to examine the position of the timer shaft or to conduct a continuity test on the timer to determine its setting.



**Control Console**

The drum opening was examined and the door switch, door catches and the manufacturer's labels had been consumed. The door was not attached nor was it included with the evidence. The lint filter and lint trap had been entirely consumed during the fire. The drum did not contain a load line, which was consistent with the report that the housekeeper had removed the contents of the drum after she discovered the fire. All three plastic drum paddles had been consumed.



**Drum Opening**



**Consumed Lint Trap**

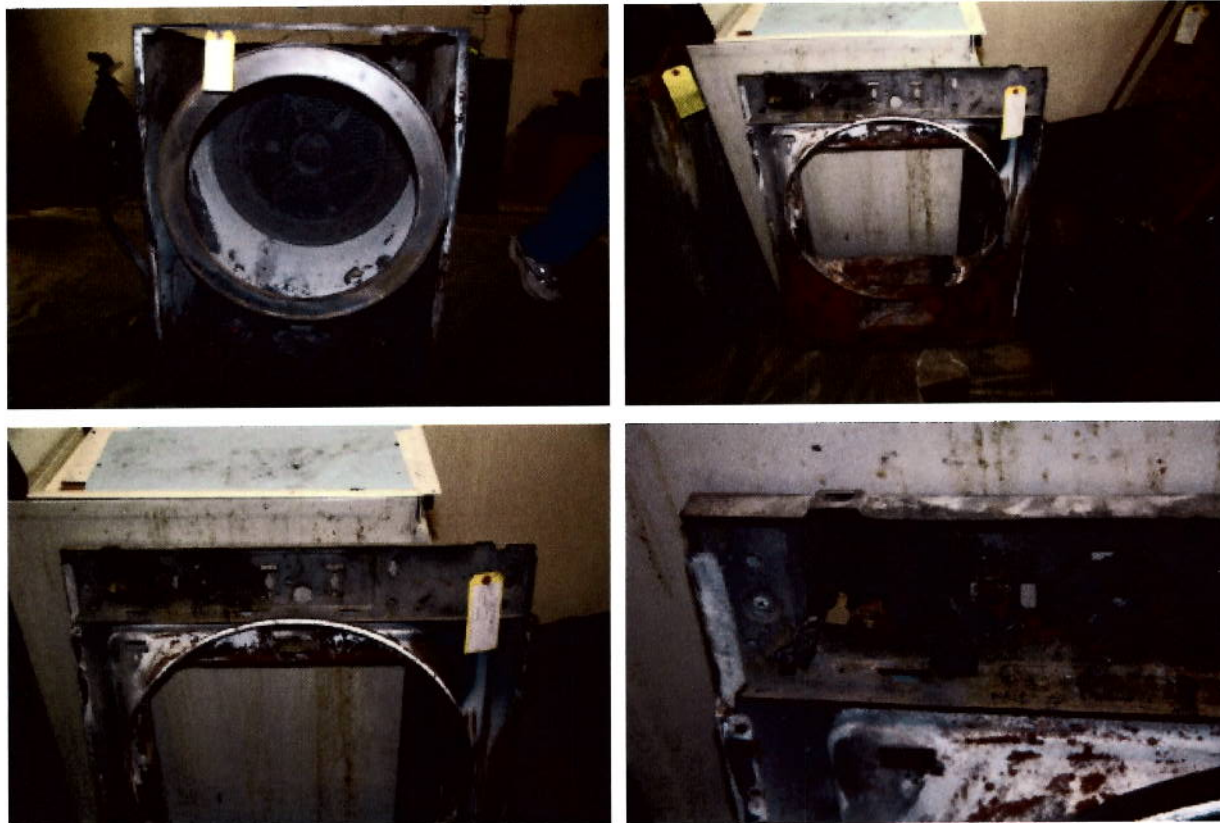


**Interior of the Drum**

The dryer top had not been installed on the appliance at the time of the fire. Examination of the top of the dryer revealed that the interior panels are fire damaged. The belt was consumed. The witness marks on the drum reveal the belt was in place at the time of the fire. The front panel screws were missing and had been removed post fire during a prior examination of the dryer. The front panel was removed from the dryer to allow further inspection of the interior of the front panel. The majority of the conductors and components from the wiring harness in the area of the front-mounted control console was also missing and could not be evaluated for the

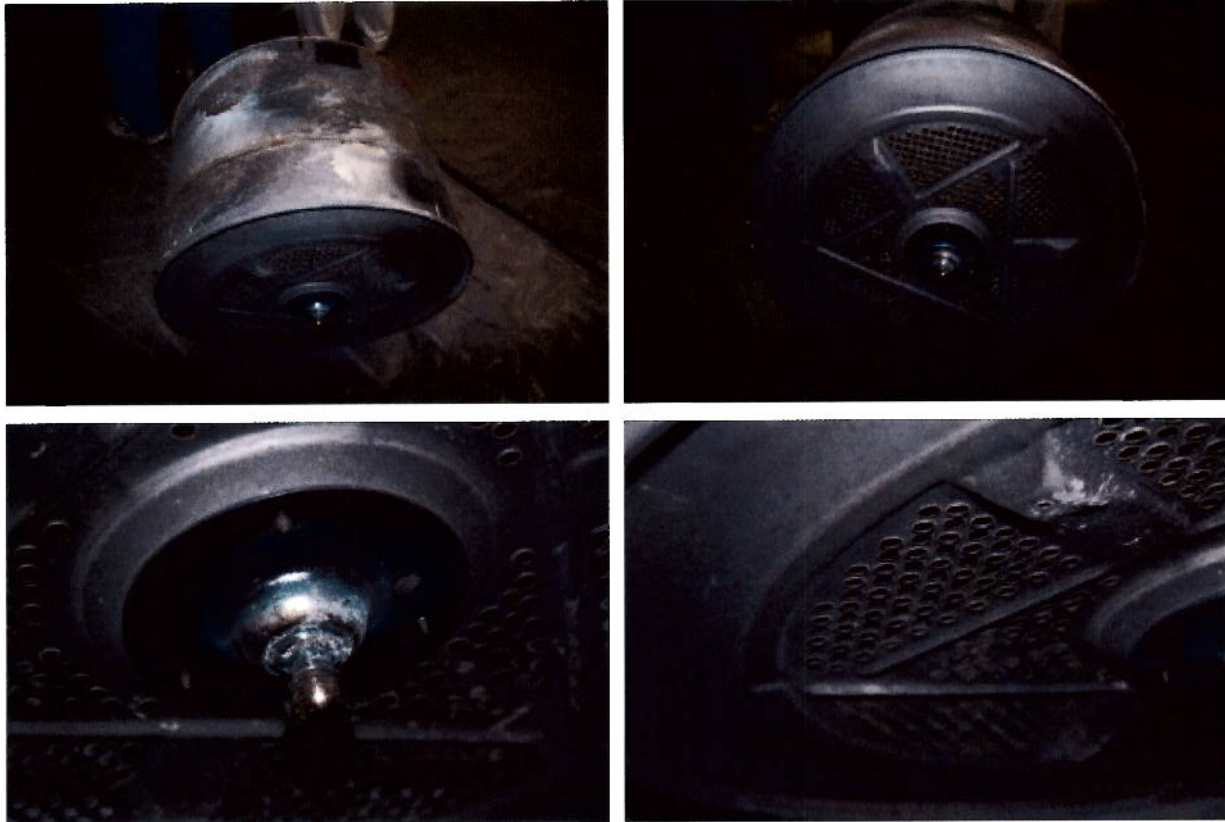


presence of electrical activity. No electrical activity was observed on the remaining conductors. The plastic trap duct had been entirely consumed, as had the plastic blower housing at the right front corner of the cabinet.



**Front Panel Removed**

Examination of the drum reveals the drum pivot shaft is fully intact and undamaged from mechanical scoring. The rear of the drum was not equipped with a heat shield/baffle. There was no accumulation of lint remaining on the rear of the drum surrounding the numerous perforations at the time of this inspection. Any additional lint that usually collects in this area was likely consumed during the fire or dislodged from firefighting efforts or evidence collection and transport.



**Rear of the Drum**

Examination of the interior of the cabinet with the drum removed reveals the floor of the cabinet was mostly devoid of lint. The plastic blower housing and plastic fan impeller had been consumed, and a minor amount of the melted plastic remaining had re-solidified along the floor of the cabinet. The motor had shifted positions during removal from the home or during evidence transport.







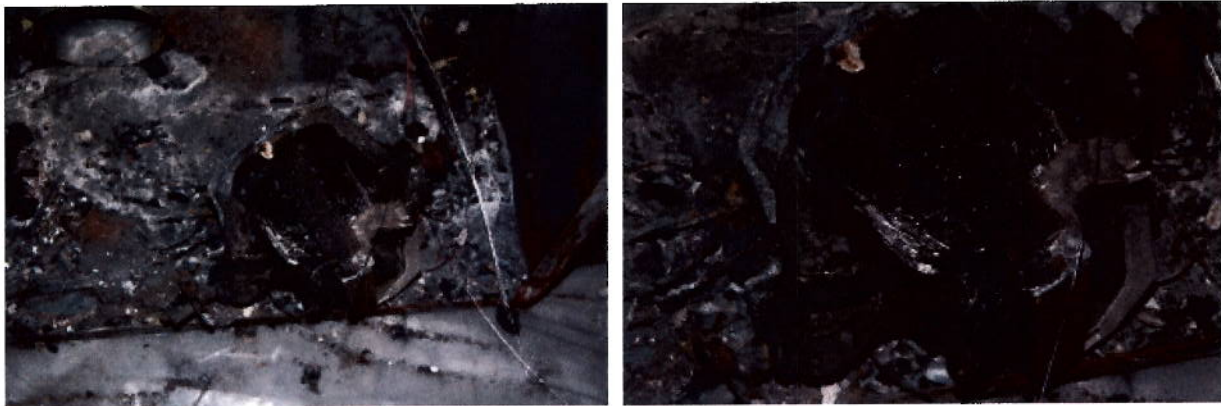
**Interior of Cabinet**

The remainder of the wiring harness was examined. The majority of the wires from within the cabinet were found loose in the base of the appliance. The insulation had been entirely consumed. Two of these loose conductors showed signs of electrical activity. The presence of electrical activity indicated that the dryer was energized during the fire.



**Wiring Harness and Loose Wiring**

Examination of the motor reveals that it was displaced from its original position by firefighting efforts and/or transport. The windings were intact and were slightly discolored from external heat damage. There was no lint on the motor. The alloy frame of the motor was melted and partly consumed. There was no sign of electrical activity on the windings or the attached conductors. The shaft of the motor could not be manually rotated due to the front bearing and frame damage. The centrifugal switch was consumed and could not be manually tested.



**Motor**

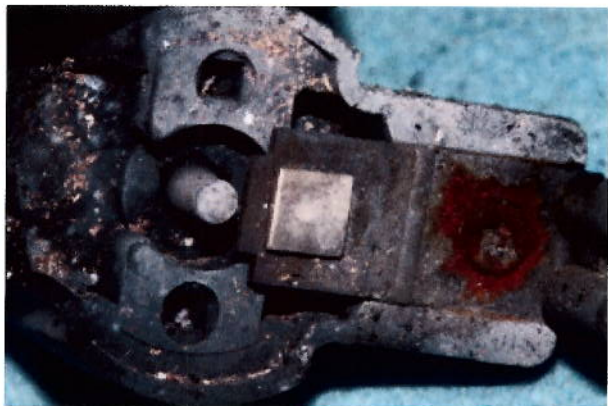
The operational thermostat was not found amongst the plastic blower housing at the front of the cabinet that was consumed during the fire, but was found loose in the cabinet. The operational thermostat had been consumed during the course of the fire, making it impossible to test for operation.

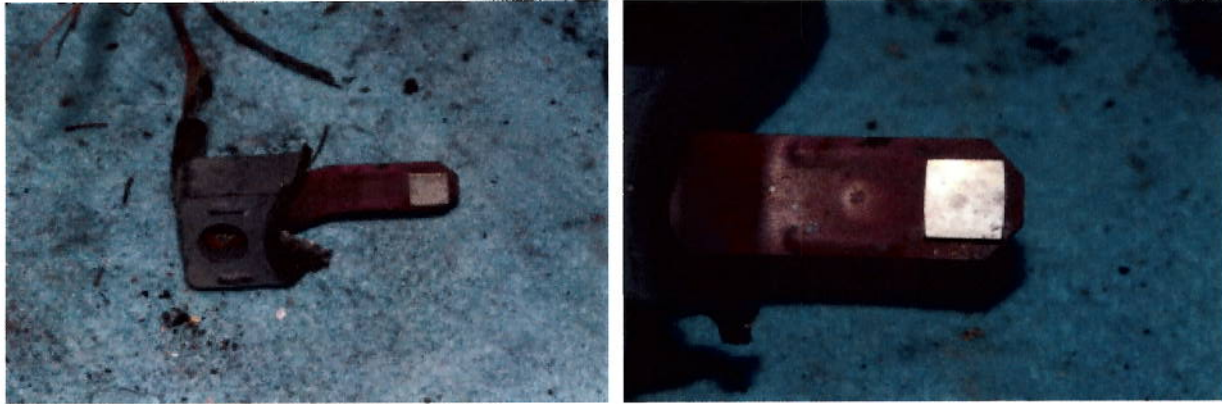


**Operational Thermostat**



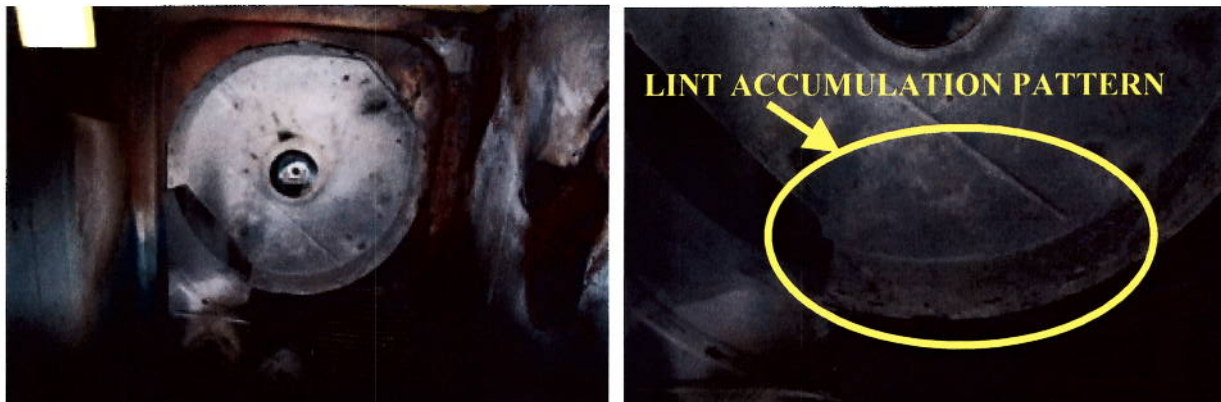
Examination of the automatic resettable high limit safety switch that had been located at the one o'clock position of the heat diffuser pan revealed that it was heavily damaged and broken apart. The high limit's contacts were found loose in the base of the cabinet. In addition, one of the screws that secured this component to the heater housing was not in its OEM position. This indicated it was either manipulated during a prior examination, or had loosened as a result of the fire, firefighting activities or evidence transport. The insured indicated that the dryer had never been serviced, so manipulation of this screw during service was ruled out. The typical rating for this high limit safety device is L180-40F. Due to the damage, the automatic resettable high limit safety switch was not operationally tested. A visual inspection of the contact surfaces was conducted and no evidence of cycling was observed on the contacts. Based upon these observations it was clear that the automatic resettable high limit safety switch had not been operating repeatedly due to deficient airflow over the lifetime of use. This does in no way support that the dryer was improperly installed as related to the lack of the top lid when it was installed under counter, or that the exhaust system was overly restricted.





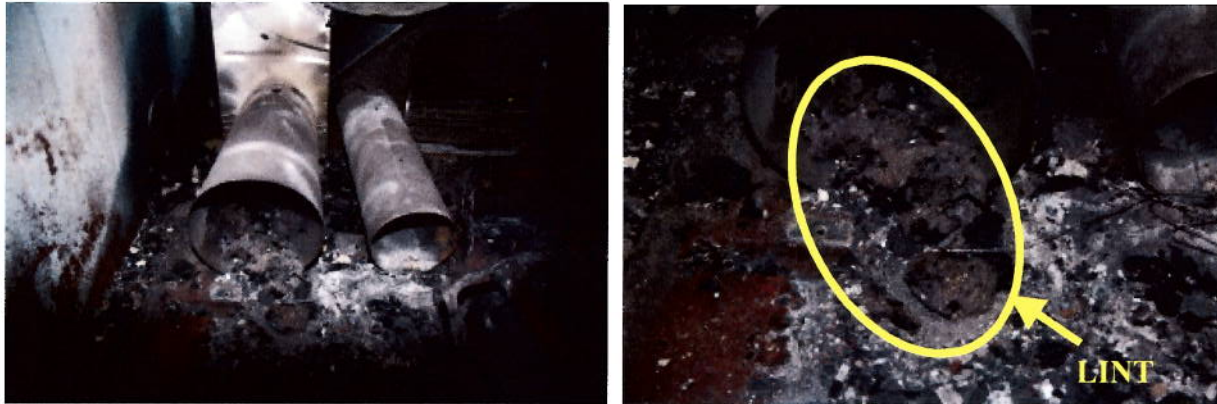
**High Limit Safety Switch**

Examination of the heat diffuser pan mounted to the rear of the cabinet revealed no charred lint remaining inside at the time of this inspection. The heavy heat damage and oxidation of the metal was consistent with heavy fire damage that would have consumed a majority of this lint. An area of localized oxidation was observed at approximately the six o'clock position of the diffuser pan. This was consistent with a large quantity of lint being present there at the time the fire originated. A mass of partially unburned lint was also observed in the base of the cabinet in the area of the burner assembly and was determined to have been dislodged from the 6 o'clock position of the diffuser. This evidence of lint accumulation (first fuel) is in proximity to the heat source (burner flame) and was determined to be the first fuel ignited, though it was consumed during the fire and/or dislodged during firefighting operations and/or evidence transport.



**Heat Diffuser Pan and Right Edge of Vertical Heat Duct**





**Lint From Diffuser At The Front Of The Burner Tube**

Examination of the burner tube and gas burner assembly revealed these components had no accumulation of lint on them. If any lint had been present, it would have been consumed during the fire, as this area was heavily fire damaged. The air shutters for the burner nozzle were examined but neither the upper or lower shutter was blocked by lint. The gas valve assembly displayed heat damage to the components. A pressure test was conducted of the gas train but failed to hold pressure. The leak was determined to be the result of fire attacking the gas valve. This indicates there was no malfunction of the gas valve or burner assembly that would allow for the uncontrolled escape of gas pre-fire, but rather occurring as a result of the fire. The gas train was removed for further examination and the burner assembly was found to be equipped with a size 44 orifice, which is appropriate for natural gas. As previously mentioned, unburned lint was observed in the burner tube, at the base of the vertical heat duct. This lint had entered this area after the fire, during firefighting operations or evidence transport.



**Gas Burner Assembly**



**Lint Within Burner Tube**

Based upon this evidence examination, it is determined that the fire originated within this Electrolux gas-fired dryer. No causes could be identified relating to any electrical or mechanical failures of the internal components. Based upon the information provided, the fire was first observed in the area of the trap duct. The dryer was most probably operating at the time of the fire but was off during the fire, either by the housekeeper turning the timer off upon fire discovery or when the door was opened. The housekeeper also removed the load from the dryer, removed the lint screen and attempted to extinguish the fire by pouring water into the trap duct. In addition to the information provided that the load was removed upon fire discovery, the fire patterns do not support a drum fire. Therefore, contamination of the load by combustible liquids or materials prone to spontaneous combustion was eliminated as a cause to this fire. The only remaining ignition scenario is the ignition of accumulated lint within the dryer by the burner flame.

### **Comparison of the Most Common Dryer Design Types:**

All clothes dryers contain inherent heat sources to produce the warm air needed to dry the wet clothing, either in the form of gas burners or electric resistive heating coils. They all contain motors, both to rotate the drum, to draw air over the heat source using negative pressure, and to exhaust moisture and lint laden air from the dryer using positive pressure. Variations in design and components result in the differences between the major design types, as well as the